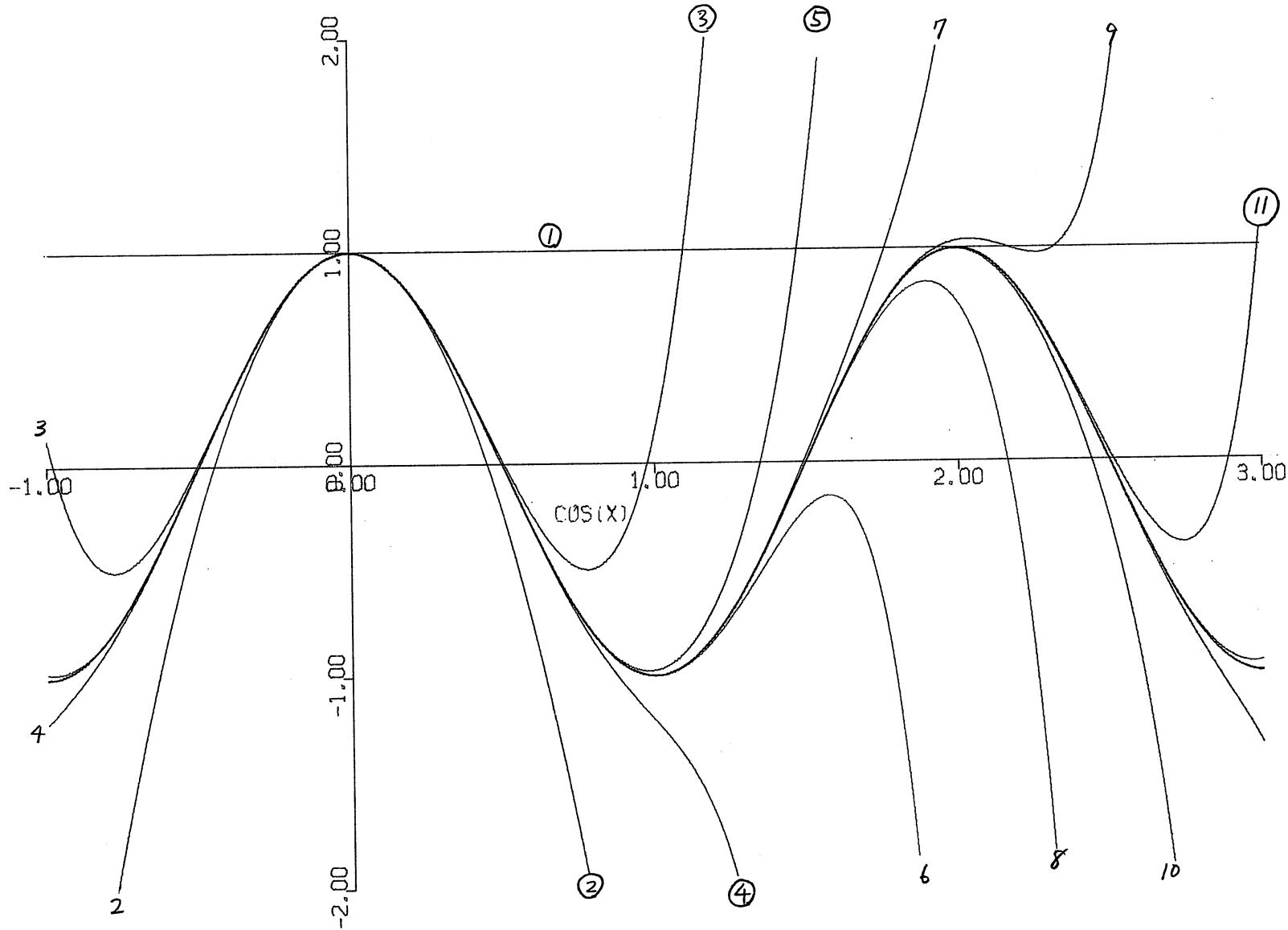


$y = \cos x$ とテーラー展開

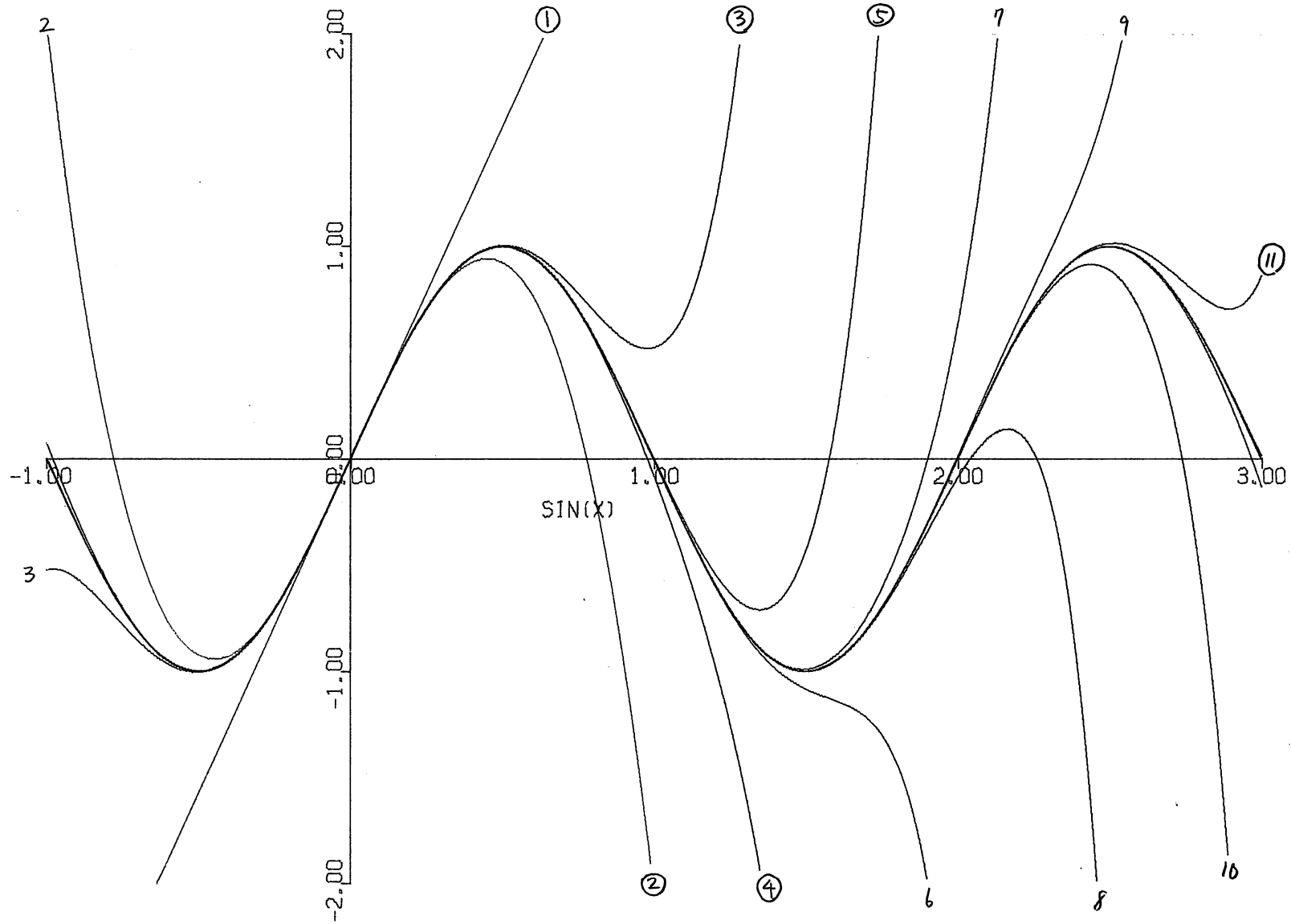


1. $y = 1$
2. $y = 1 - \frac{x^2}{2!}$
3. $y = 1 - \frac{x^2}{2!} + \frac{x^4}{4!}$
4. $y = 1 - \frac{x^2}{2!} + \frac{x^4}{4!} - \frac{x^6}{6!}$
5. $y = 1 - \frac{x^2}{2!} + \frac{x^4}{4!} - \frac{x^6}{6!} + \frac{x^8}{8!}$

$$11. y = 1 - \frac{x^2}{2!} + \frac{x^4}{4!} - \frac{x^6}{6!} + \frac{x^8}{8!} - \frac{x^{10}}{10!} + \frac{x^{12}}{12!} - \frac{x^{14}}{14!} + \frac{x^{16}}{16!} - \frac{x^{18}}{18!} + \frac{x^{20}}{20!}$$

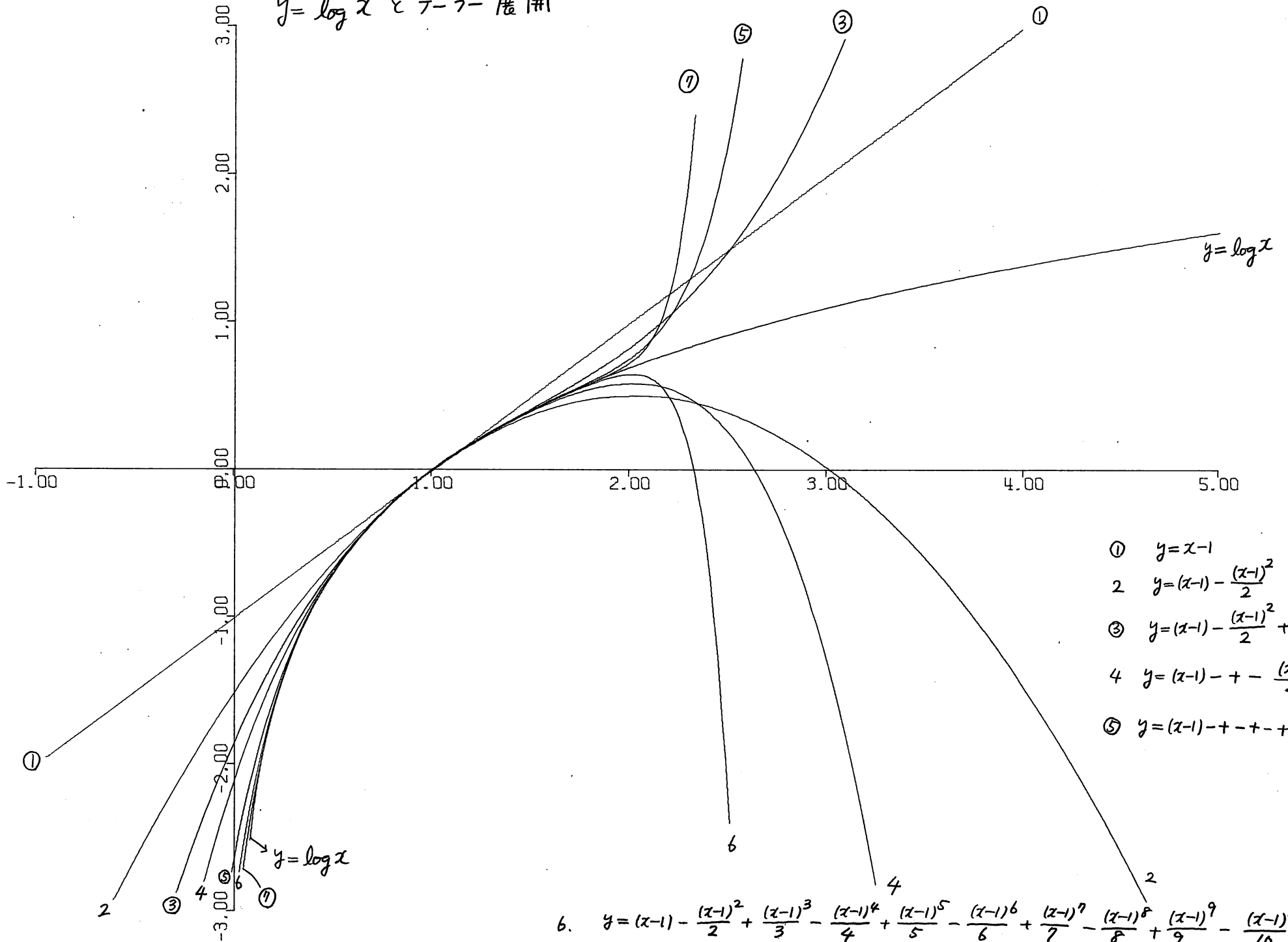
$y = \sin x$ と テーラー展開

1. $y = x$
2. $y = x - \frac{x^3}{3!}$
3. $y = x - \frac{x^3}{3!} + \frac{x^5}{5!}$
4. $y = x - \frac{x^3}{3!} + \frac{x^5}{5!} - \frac{x^7}{7!}$
5. $y = x - \frac{x^3}{3!} + \frac{x^5}{5!} - \frac{x^7}{7!} + \frac{x^9}{9!}$



$$11. y = x - \frac{x^3}{3!} + \frac{x^5}{5!} - \frac{x^7}{7!} + \frac{x^9}{9!} - \frac{x^{11}}{11!} + \frac{x^{13}}{13!} - \frac{x^{15}}{15!} + \frac{x^{17}}{17!} - \frac{x^{19}}{19!} + \frac{x^{21}}{21!}$$

$y = \log x$ とテーラー展開



- ① $y = x - 1$
- 2 $y = (x-1) - \frac{(x-1)^2}{2}$
- ③ $y = (x-1) - \frac{(x-1)^2}{2} + \frac{(x-1)^3}{3}$
- 4 $y = (x-1) - \frac{(x-1)^2}{2} + \frac{(x-1)^3}{3} - \frac{(x-1)^4}{4}$
- ⑤ $y = (x-1) - \frac{(x-1)^2}{2} + \frac{(x-1)^3}{3} - \frac{(x-1)^4}{4} + \frac{(x-1)^5}{5}$

6. $y = (x-1) - \frac{(x-1)^2}{2} + \frac{(x-1)^3}{3} - \frac{(x-1)^4}{4} + \frac{(x-1)^5}{5} - \frac{(x-1)^6}{6} + \frac{(x-1)^7}{7} - \frac{(x-1)^8}{8} + \frac{(x-1)^9}{9} - \frac{(x-1)^{10}}{10}$

⑦ $y = (x-1) - \frac{(x-1)^2}{2} + \frac{(x-1)^3}{3} - \frac{(x-1)^4}{4} + \frac{(x-1)^5}{5} - \frac{(x-1)^6}{6} + \frac{(x-1)^7}{7} - \frac{(x-1)^8}{8} + \frac{(x-1)^9}{9} - \frac{(x-1)^{10}}{10} + \frac{(x-1)^{11}}{11} - \frac{(x-1)^{12}}{12} + \frac{(x-1)^{13}}{13}$